

What is claimed is:

1. An image forming apparatus wherein a latent image on a latent image carrier is developed using a liquid developer, in which toner particles are dispersed in a carrier liquid and of which toner density is about 5 through 40 wt%, thereby forming a toner image, and the toner image is transferred onto a transfer medium, said apparatus comprising:

an optical sensor including a light emitter which irradiates light upon a toner image formed as a patch image on said latent image carrier, and a light receiver which receives light from the patch image; and

control means controlling an image forming condition which influences a toner image density based on a received-light signal from said light receiver.

2. The image forming apparatus of claim 1, wherein an average thickness of a layer of the carrier liquid in the patch image formed on said latent image carrier is larger than an average thickness of a layer of the toner particles.

3. The image forming apparatus of claim 1, wherein said light receiver receives regularly reflected light by the patch image which is irradiated by the light from said light emitter.

4. An image forming method wherein a latent image on a

latent image carrier is developed using a liquid developer, in which toner particles are dispersed in a carrier liquid and of which toner density is about 5 through 40 wt%, thereby forming a toner image, and the toner image is transferred onto a transfer medium, said method comprising the steps of:

irradiating light upon a toner image formed as a patch image on said latent image carrier;

receiving light from the patch image; and

controlling an image forming condition which influences a toner image density based on a received-light signal.

5. An image forming apparatus, comprising:

a latent image carrier structured to carry a latent image on its surface;

a liquid developer carrier which transports, to a developing position facing said latent image carrier, a liquid developer in which toner particles are dispersed in a carrier liquid and of which toner density is about 5 through 40 wt%, while carrying the liquid developer on its surface, brings the liquid developer into contact with said latent image carrier at the developing position, thereby supplying the liquid developer to said latent image carrier;

image forming means which makes the toner particles contained in the liquid developer supplied to said latent image carrier from said liquid developer carrier adhere to said latent image carrier, thereby visualizing

the latent image and forming a toner image;

transfer means which transfers the toner image on said latent image carrier onto a transfer medium at a predetermined transfer position;

an optical sensor including a light emitter which irradiates light upon a toner image as a patch image transferred onto said transfer medium, and a light receiver which receives light from the patch image; and

control means controlling an image forming condition which influences a toner image density based on a received-light signal from said light receiver.

6. The image forming apparatus of claim 5, wherein said light receiver receives regularly reflected light by the patch image which is irradiated by the light from said light emitter.

7. The image forming apparatus of claim 5, wherein the viscosity of the carrier liquid is about 5 through 3000 mPa·s.

8. An image forming method, comprising:

a liquid developer supplying step of transporting a liquid developer, in which toner particles are dispersed in a carrier liquid and of which toner density is about 5 through 40 wt%, to a developing position facing a latent image carrier while carrying the liquid developer on a surface of a liquid developer carrier, bringing the liquid developer into contact with said latent image carrier at the developing position, thereby supplying the liquid

developer to said latent image carrier;

an image forming step of making the toner particles contained in the liquid developer supplied to said latent image carrier from said liquid developer carrier adhere to said latent image carrier, thereby visualizing a latent image formed on said latent image carrier and forming a toner image;

a step of transferring the toner image on said latent image carrier onto a transfer medium at a predetermined transfer position;

a step of irradiating light upon a toner image as a patch image transferred onto said transfer medium;

a step of receiving light from the patch image; and

a step of controlling an image forming condition which influences a toner image density based on a received-light signal.